

The C-One Computer

The C-One computer started off as a 2002 enhanced adaptation of the Commodore 64 — the most-sold computer model (Guinness book of World Records). While retaining almost all of the original's capabilities the Commodore One adds modern features, interfacing and capabilities. The C-One fills a gap in the hobbyist computer market.

During development, it evolved into a re-configurable computer, a new class of computers where the chips do not have dedicated tasks any more. The two main chips carry out different tasks, depending on the needs of the program. The technology used is called FPGA — field programmable gate arrays. These chips can be programmed to do the tasks that the chips of the C-64 or other computers have done. It's no emulation, but it's a re-implementation of the chips that are no longer available since many years.

After a cold start, the FPGA programs (also called "cores") are loaded from a mass-storage device like hard-drive or a compact flash card. What's described in one short sentence is a giant leap in computer technology: The hardware can be altered by the user without even opening the computer. The FPGA programs — so-called "cores" — turn the C-One into clones of famous 80's computers like the C-64, VIC-20, Amstrad/Schneider CPC and even the Amiga. It can, of course, also be a completely new computer with specs yet unknown, as developers can alter the hardware on their own. A good example of that is a turbo-CPC that is a lot faster than the original CPC computer, while still maintaining compatibility to the old machine.

The price is 333, - EUR, including a CPU/RAM card, a 72-pin SIMM module and the FPGA extender card that allows running the Amiga "minimig" core. The user will need to supply an ATX style case, ATX power supply, drive(s), PS/2 keyboard, mouse and VGA capable monitor. The monitor should be able to sync to vertical frequencies of 50 Hz in order to display certain core's output. Please check your monitor's specifications and read the disclaimer before you buy!

For more information, see:
www.c64upgra.de/c-one/s_about.htm

C-One Demo

[MCCC Members: Please note that this demo is taking place in Dayton, not DFW. I have included the article here because I thought the information was of interest.]

I hope to have a very interesting demo for the next meeting. I'm doing my part to stimulate the economy — the economy of Germany, that is. I decided to bite and purchased the extension board that will allow my C-One computer to become an Amiga 500. What should have been a straightforward process took a fair amount of effort on my part. I believe I wrote in the last newsletter that I contacted Jens from Individual Computers and received no reply. I tried again a week later and did get a response. It appears that Jens released a number of computer boards to dealers that have not paid for them yet. Jens claims ownership of those computers and will not ship extension boards to those "caretakers" that have them in their possession. My job was to prove to Jens that my C-One was purchased from a reliable dealer. My problem was that I purchased it 2nd hand on eBay and Jens never felt the need to put serial numbers on any of his boards

which made identification rather difficult. He also requested some photos to be sure that board was of a late enough vintage to be able to be upgraded. Well, simple things like shooting some pics that look acceptable end up eating large amounts of time and this was no exception. Jens also requested that I contact the person I bought the machine from in the fall of 2007. Anyone who has spent some quality time on eBay will know that this is a dubious undertaking wrought with peril. To my utter surprise. I received a prompt response that I just forwarded (more peril) to Jens. After more 3 way conversations, Jens was satisfied enough to take my money (\$\$\$s not Euros please!) and ship me the product. I was really hoping to have it by now and if I don't have it by the meeting, I will be entering Damage Control Mode.

The new extension board has me stoked. First of all it has energized the small C-One community and that has resulted in some big upgrades to the system. The first that you will come into contact with is a new bootloader called NewBoot. Newboot is lightning fast and allows an unlimited number of cores to be installed on a CF card. This is great because it allows for more experimentation. Some cores, like the 16-bit color picture viewer, include the picture into the hardware data. To view another picture requires loading a completely new core. The old boot-loader, BigBoot, only allowed 10 cores which I had filled already. A gentleman by the name of Peter Wendrich has taken it upon himself to document the inner workings of the C-One board to encourage more core development. I printed out the first draft to find out a second was just released. I should have that printed out for the meeting. Finally some serious literature to complement the pin-out diagrams and hardware programming listings.

The plan is to demo an emulated-in-hardware Amiga 500 with 11 megs of RAM, a hard drive and CD-ROM. That is, if I can get the board and work out all the bugs by Saturday. If not, I will demo the C-One computer running 8-bit hardware like the Vic20, Commodore 64 and Amstrad CPC in a couple of variations. Hopefully I can remember how to run the SymbOS for the Amstrad, which is a very impressive multi-tasking operating system with a full GUI that reminds me of GEOS. There is also a new core called Chameleon, which is advertised as a reverse-engineered C-64 with a 2 meg memory upgrade. Yummy.

Honestly, this programmable hardware is cutting-edge stuff and it's pretty cool that the Commodore people are taking a lead in developing it. It's also hard to explain and I've only touched some of the high points so far. Best to see it in person.

...by James Lawrence
from the AmiTech-Dayton Gazette,
February 2009

AMIT Vintage Computer Fair

The Arlington Museum of Information Technology (AMIT) is sponsoring the first annual Vintage Computer Fair Light — South, to be held in conjunction with The 15th annual Antique Science & Retro-Tech Show And Swap Meet. The combined event will be held Saturday, March 14, 2009 at the Ramada Hotel, Irving, Texas, 4440 W. Airport Freeway, from 10:00 am to 4:00 pm. Admission is \$5.

AMIT Director Gil Carrick said that this combined event should attract many visitors who are interested in displaying their vintage computing artifacts or in buying, selling, swapping or just seeing these artifacts. Vintage Computer Fairs have been held in other parts of the country, but this will be the first one in the South. Since this is the first of these events in the region, it will not feature any speakers and will only last one day — hence the term “lite.”

Antique Science & Retro-Tech Show And Swap Meet organizer Skip Solberg said that for a decade and a half the event has been a favorite spot for fans of this antique gear to show, sell and swap their stuff.

Visitors interested in displaying or selling should contact Skip Solberg at 817-994-9213 or email solberg2@airmail.net for pricing and availability of table space.

If you'd like more information about the Retro Tech Meet, or to talk with Skip Solberg, please call 817-467-0368, email solberg2@airmail.net or see the web site at <http://www.slideruleguy.com/tx-1q09.htm>.

If you'd like more information about the Vintage Computer Fair, or to talk with Gil Carrick, please call 817-994-9213, email amit@tx.rr.com or see the web site at <http://amit-tx.org/> <http://amittx.org/>

AROS OS

The AROS Research Operating System is a lightweight, efficient and flexible desktop operating system, designed to help you make the most of your computer. It's an independent, portable

and free project, aiming at being compatible with AmigaOS 3.1 at the API level (like Wine, unlike UAE), while improving on it in many areas. The source code is available under an open source license, which allows anyone to freely improve upon it.

The goals of the AROS project are it to create an OS which:

1. Is as compatible as possible with AmigaOS 3.1.
2. Can be ported to different kinds of hardware architectures and processors, such as x86, PowerPC, Alpha, Sparc, HPPA and other.
3. Should be binary compatible on Amiga and source compatible on any other hardware.
4. Can run as a standalone version which boots directly from hard disk and as an emulation which opens a window on an existing OS to develop software and run Amiga and native applications at the same time.
5. Improves upon the functionality of AmigaOS.

To reach this goal, we use a number of techniques. First of all, we make heavy use of the Internet. You can participate in our project even if you can write only one single OS function. The most current version of the source is accessible 24 hours per day and patches can be merged into it at any time. A small database with open tasks makes sure work is not duplicated.

For more information:
<http://aros.sourceforge.net/>

March Calendar

March 4 — Amiga-By-The-Loop Chapter
7:00 pm — South Grand Prairie Library
760 Bardin Road, Grand Prairie

March 4 — MCCC Board of Director's Meeting
Approx 9:15 pm — Location TBD

March 28 — Newsletter Deadline — 7:00 am

MCCC P.O.Box 813 Bedford, Texas 76095 <http://www.amigamccc.org>